#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026559

Address: 333 Burma Road **Date Inspected:** 24-Oct-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 Prime Contractor: American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Jobsite

**CWI Name: CWI Present:** Yes No As noted below **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006 **Component: SAS OBG** 

#### **Summary of Items Observed:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

- 1. 7E PP57 Pipe Welding (Exterior)
- 12W 13W Side Plate "E" (Exterior)
- 3. 12W 13W Edge Plate "F" (Interior)
- 4. 7E PP59 Pipe Welding (Exterior)
- 5. 12E 13E Edge Plate "F" (Interior)
- 6. 13E 14E "A" Deck Seal Passes (Exterior)
- 7. 13E 14E "A2" Deck Seal Passes (Exterior)
- 13E 14E "A3" Deck Seal Passes (Exterior)
- 7W PP57 Pipe Welding (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing Shielded Metal Arc Welding (SMAW) in the 2G horizontal position on 4" domestic water pipe and 2.5" compressed air pipe located at 7E PP57 weld #7/2.5/57/NE and weld #7/4/57/NE. The QA inspector verified the fit up of the joints and found it to be satisfactory. The QA inspector observed the QC inspector identified as Steve Jensen- monitoring the welding to ensure the welding parameters were in compliance pertaining to WPS-1-12-1 Revision 2 (1.12). The welder was observed implementing 6010 electrodes in the root pass with the balance using 7018 electrodes. The

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QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work appears to be in general conformance with the contract documents.

#### 2. 12W 13W Side Plate "E" (Exterior)

The QA inspector observed ABF welder Rory Hogan ID#3186 utilizing Plasma Arc Cutting to remove sections of the backing bar on the exterior of the OBG at Side Plate "E". The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appeared to be in general conformance to the contract requirements.

# 12W 13W Edge Plate "F" (Interior)

The QA inspector randomly observed ABF welding operator Jorge Lopez ID#6149 performing Flux Core Arc Welding with Gas (FCAW-G) in the 3G position on edge plate "F" at 12W 13W of the OBG. The QA inspector observed the QC inspector identified as John Pagliero monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-3110-3. The parameters were noted as (A/250/V22). The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

#### 7E PP59 Pipe Welding (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing Shielded Metal Arc Welding (SMAW) in the 2G horizontal position on 4" domestic water pipe and 2.5" compressed air pipe located at 7E PP59 weld #8/2.5/59/NE and weld #8/4/59/NE. The QA inspector verified the fit up of the joints and found it to be satisfactory. The QA inspector observed the QC inspector identified as Steve Jensen monitoring the welding to ensure the welding parameters were in compliance pertaining to WPS-1-12-1 Revision 2 (1.12). The welder was observed implementing 6010 electrodes in the root pass with the balance using 7018 electrodes. The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work appears to be in general conformance with the contract documents.

# 12E 13E Edge Plate "F" (Interior)

The QA inspector randomly observed ABF welding operator Fred Kaddu ID#2188 performing Shielded Metal Arc Welding (SMAW) in the 3G position on edge plate "F" at 12E 13E of the OBG. The QA inspector observed the QC inspector identified as Jesse Cayabyab monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1110A Revision 1. The parameters were noted as (A/135). The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

# 13E 14E "A5" Deck Seal Passes (Exterior)

The QA Inspector randomly observed ABF welder Wai Kit Lai ID#2953 perform FCAW-G in the 1G Flat position on A5 of 13E 14E on the exterior of the OBG. The QA inspector observed the QC inspector identified as

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John Pagliero monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-F3200-2. The parameters were noted as (A/270/V/24/TS/440/HI/0.88). The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

#### 13E 14E "A2" Deck Seal Passes (Exterior)

The QA Inspector randomly observed ABF welder Xiao Jian Wan ID#9677 perform FCAW-G in the 1G Flat position on A2 of 13E 14E on the exterior of the OBG. The QA inspector observed the QC inspector identified as John Pagliero monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-F3200-2. The parameters were noted as (A/252/V/23/TS/520/HI/0.67). The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

# 13E 14E "A3" Deck Seal Passes (Exterior)

The QA Inspector randomly observed ABF welder Richard Garcia ID#5892 perform FCAW-G in the 1G Flat position on A3 of 13E 14E on the exterior of the OBG. The QA inspector observed the QC inspector identified as John Pagliero monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-F3200-2. The parameters were noted as (A/240/V/23/TS/400/HI/0.82). The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

The QAI reviewed the observations and inspection with QA Lead Inspector, Daniel Reyes, written in this report. No issues were noted by the QAI and the QA Lead Inspector concurs with the QA report.

#### **Summary of Conversations:**

At the beginning the shift the QA inspector met with QC inspector William Sherwood and discussed the welders assignments and locations for the shift to include pending issues, ongoing work and required testing.

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#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

**Inspected By:** Frey,Doug **Quality Assurance Inspector Reviewed By:** Levell,Bill **QA** Reviewer